

In the Claims

The listing of claims will replace all prior versions, and listings, of claims in the application. Please cancel claim 14, as shown:

1-7. (Cancelled).

8. (Currently Amended) A pump system for passing a hydrocarbon/water mixture ~~use~~ in a hydrocarbon well ~~from the well to the surface through a tubing, said pump system~~ comprising:

- an electric submersible pump capable of being immersed in a the hydrocarbon well and positioned operatively at a first portion of said tubing inside said well;
- an electrical supply source operatively connected to said pump for providing electrical power to the pump when immersed in the well; and
- an electromagnetic flow meter positioned at a second portion of said tubing downstream said pump said electromagnetic flow meter being operatively connected associated with the said pump when immersed in the well, wherein said electromagnetic flow meter comprises an electromagnetic flow meter which is supplied with electrical power from the said electrical supply source, and wherein said electromagnetic flow meter comprises means for measuring a velocity of the hydrocarbon/water mixture passing through said tubing

9. (Currently amended) The system as claimed in claim 8, wherein said tubing further comprising ~~comprises~~ a production tubing extending from the bottom of the well to a well head, the pump being carried on the production tubing.

10. (Currently Amended) The system as claimed in claim 9, wherein said tubing further comprises further comprising a surface tubing positioned outside the well and connected to the production tubing, the electromagnetic flow-meter being carried on the surface tubing.
11. (Currently amended) The system as claimed in claim 8, wherein the pump comprises a submersible pump is driven by an electric motor.
12. (Previously Presented) The system as claimed in claim 8, wherein the electric supply source is positioned at the surface and is capable of delivering a power of between 100 and 1000 kW, and a current of between approximately 10 and 100 A.
13. (Previously Presented) The system as claimed in claim 8, wherein the pump and the electromagnetic flow-meter are connected in series.
14. (Cancelled).